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D.T.E. 99-26

Petition of Fall River Gas Company for Approval of its Long-Range Forecast and Supply Plan for the Period 1998-1999 to 2002-2003.

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TABLE OF CONTENTS

I. INTRODUCTION AND PROCEDURAL HISTORY 1

II. ANALYSIS OF THE LONG-RANGE FORECAST 2

A. Standard of Review 2

B. Previous Sendout Forecast Review 3

C. Planning Standards 4

1. Weather Data 5

a. Description 5

b. Analysis and Findings 5

2. Normal Year Standard 5

a. Description 5

b. Analysis and Findings 6

3. Design Year Standard 6

a. <u>Description</u>	6
b. <u>Analysis and Findings</u>	8
4. <u>Design Day Standard</u>	9
a. <u>Description</u>	9
b. <u>Analysis and Findings</u>	10
5. <u>Conclusions on Planning Standards</u>	11
D. <u>Forecasting Methods</u>	12
1. <u>Forecasting Model</u>	12
a. <u>Description</u>	12
2. <u>Econometric Forecasting</u>	13
a. <u>Analysis and Findings</u>	14
3. <u>Normal and Design Year Sendout Forecast</u>	15
a. <u>Description</u>	15
b. <u>Analysis and Findings</u>	16
4. <u>Design Day Sendout Forecast</u>	16
a. <u>Description</u>	16
b. <u>Analysis and Findings</u>	16
5. <u>Cold Snap</u>	16
E. <u>Conclusions on the Sendout Forecast</u>	17
III. <u>ANALYSIS OF THE SUPPLY PLAN</u>	17
A. <u>Standard of Review</u>	17
B. <u>Base Case Supply Plan</u>	19
1. <u>Supply-Side Resources</u>	19

2. Conservation and Load Management 21

C. Adequacy of the Supply Plan 22

1. Normal and Design Year Adequacy 22

a. Description 22

b. Analysis and Findings 24

2. Design Day Adequacy 24

a. Description 24

b. Analysis and Findings 25

3. Cold Snap Adequacy 25

a. Description 25

b. Analysis and Findings 26

4. Conclusions on the Adequacy of the Supply Plan 26

D. Supply Planning Process 27

1. Standard of Review 27

2. Identification and Evaluation of Resource Options 28

a. Supply-Side Resources 28

i. Description 28

ii. Analysis and Findings 30

b. Demand-Side Management 30

i. Description 30

ii. Analysis and Findings 31

3. Consideration of All Resources on an Equal Basis 32

a. Description 32

- b. Analysis and Findings 32
- 4. Conclusions on the Supply Planning Process 33
- E. Least-Cost Supply 33
 - 1. Fall River's Least-Cost Analysis 33
 - a. Description 33
 - b. Analysis and Findings 34
- F. Conclusions on the Supply Plan 34

I. INTRODUCTION AND PROCEDURAL HISTORY

On March 5, 1999, pursuant to G.L. c. 164, § 69I, Fall River Gas Company ("Fall River" or "Company") filed with the Department of Telecommunications and Energy ("Department")⁽¹⁾ a petition for approval of its long-range forecast and resource plan for the split years⁽²⁾ 1998-1999 through 2002-2003⁽³⁾. The petition was docketed as D.T.E. 99-26.

Fall River is a regulated natural gas distribution utility headquartered in Fall River, Massachusetts. The Company serves 45,000 utility customers in four Massachusetts municipalities located in Southeastern Massachusetts. The population of the Company's service area is approximately 130,000 people.

Pursuant to notice duly issued, the Department conducted a public hearing and procedural conference in Boston on May 26, 1999. The Department held a Technical Session on June 23, 1999.

An evidentiary hearing was held at the Department's offices on July 26, 1999. Fall River presented two witnesses in support of its Forecast and Supply Plan: John F. Fanning, the Vice President - Production and Gas Supply for the Company and James L. Harrison, a principal of Management Applications Consulting, Inc ("MAC"). The evidentiary record includes three Company exhibits consisting of the Company's Report on its proposed Forecast and Supply Plan, all the standard schedules for a forecast and supply plan, an econometric supply forecast, relevant supporting data and workpapers; and 63 Department exhibits, consisting of the Company's responses to Department information requests and four Company responses to record requests. On August 5, 1999, the Company filed a brief supporting its petition.

II. ANALYSIS OF THE LONG-RANGE FORECAST

A. Standard of Review

Pursuant to G.L. c. 164, § 69I, the Department is required to ensure "a necessary energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost." In accordance with this mandate, the Department reviews the long range forecast of each gas utility to ensure that the forecast accurately projects the gas sendout requirements of the utility's market area. G.L. c. 164, § 69I. A forecast must reflect accurate and complete historical data, and reasonable statistical projection methods. G.L. c. 164, § 69I; 980 C.M.R. § 7.02 (9)(b). Such a forecast should provide a sound basis for resource planning decisions. Colonial Gas Company, D.P.U. 96-18, at 4 (1996); Bay State Gas Company, D.P.U. 93-129, at 5 (1996); Holyoke Gas and Electric Department, D.P.U. 93-191, at 2 (1996); Berkshire Gas Company, 16 DOMSC 53, at 56 (1987).

In its review of a forecast, the Department determines if a projection method is reasonable based on whether the methodology is: (a) reviewable, that is, contains enough information to allow a full understanding of the forecast methodology; (b) appropriate, that is, technically suitable to the size and nature of the particular gas company; and (c) reliable, that is, provides a measure of confidence that the gas company's assumptions, judgments, and data will forecast what is most likely to occur. D.P.U. 96-18, at 5; D.P.U. 93-129, at 5; D.P.U. 93-191, at 2; Haverhill Gas Company, 8 DOMSC 48, at 50-51 (1982). Specifically, the Department examines a gas company's: (1) planning standards, including its weather data;

(2) forecast method, including the forecast results; and (3) derivation and results of its design and normal sendout forecasts. See D.P.U. 96-18, at 5 and D.P.U. 93-129, at 5-6; D.P.U. 93-13, at 6; see also, Boston Gas Company, D.P.U. 94-109 (Phase 1), at 9 (1996). As part of the review of the forecast, the Department also examines the company's scenario analysis, which is used for evaluating the flexibility of the company's planning process, including any cold-snap analysis⁽⁴⁾ and sensitivity analysis. Boston Gas Company, 25 DOMSC 116, at 200 (1992) ("1992 Boston Gas Decision"); see D.P.U. 93-129, at 23-25 and D.P.U. 94-109

(Phase 1), at 61-66.

B. Previous Sendout Forecast Review

The last review completed for a forecast and supply plan filed by the Company was described by the Energy Facilities Siting Council in its decision in Fall River Gas Company, Dkt. No. 85-20 (1986) in which the Company's Forecast and Supply Plan was approved with directions for future filings. Specifically, the Company was directed to develop further data on customer use factors and average use per customers, to improve data and documentation regarding the Company's sendout forecast for the commercial and industrial classes and to address further a variety of supply contingencies. Fall River Gas Company, E.F.S.B. 85-20, at 123-4. To the extent that such conditions remain apropos for discussion, this Order addresses the Company's compliance with the Department's directives in Section II.

The Forecast and Supply Plan presented by Fall River is an integrated and comprehensive five-year demand forecast and associated resource plan and a comprehensive description of the Company's integrated resource planning process. The forecast is based upon econometric techniques that integrate engineering and marketing inputs, as well as a detailed analysis of the Company's market area.

C. Planning Standards

The first element of the Department's forecast review is an assessment of a company's planning standards in order to determine if they are reviewable, appropriate, and reliable. A company's planning standards are used as a basis for projecting its sendout forecast, which, in turn, is used to ascertain the adequacy and cost of a company's supply plan. The Department's review of a company's planning standards begins with an examination of a company's weather data, and continues with an analysis of how a company arrived at its normal year, design year, and design day⁽⁵⁾

standards.

1. Weather Data

a. Description

Fall River obtained its local weather data on a consistently calculated daily basis for the period from January 1, 1965 through June 30, 1998 from Weather Services Corporation, Inc. ("WSC") (Exh. FRG-1, at 8). WSC tabulated the effective degree days ("EDD") that the Company uses as the basis of its load projections (id.).

b. Analysis and Findings

The Department finds that because Fall River uses weather data specific to its service territory, its use of the weather data described within the MAC study is appropriate for input into its planning standards. Further, the Company's nearly 35-year database from WSC is comparable to other weather databases approved previously by the Department. D.P.U. 93-13, at 10; 1992 Boston Gas Decision, at 135-136; Colonial Gas Company, 23 DOMSC 351, 363-364 (1991) ("1991 Colonial Gas Decision"). Therefore, the Department concludes that Fall River has developed an adequate database from which to develop the Company's planning standards. The Department finds that the weather data used by Fall River is reviewable, appropriate, and reliable.

2. Normal Year Standard

a. Description

Fall River developed its normal year standard using 20 years of weather data

(Exh. FRG-1, at 9). The Company first computed the average annual degree days for the most recent 20-year period, 1979 to 1998, (Tr. at 35). Next, Fall River computed the average degree day in each month over the same period (Exh. FRG-1, at 9). The Company then modeled the typical day-to-day variation in degree days by (1) selecting a typical month whose total degree days were similar to the 20-year average and standard deviation for each month, and (2) prorating the daily values to match exactly the 20-year average for the month, because the degree days in these typical months did not match exactly the 20-year average. These prorated values served as a proxy for daily heating degree days for the normal year (id.). Based on this method, the Company calculated its normal year standard of 6,303 Degree Days ("DD") (FRG-1, Schedule 2). Of this amount, the Company expects 5,446 DD to occur during the heating season (id.).

b. Analysis and Findings

The use of an arithmetic average of historical DD data to establish a normal year standard has been accepted previously by the Department. D.P.U. 96-18, at 9; D.P.U. 93-13, at 10; 1992 Boston Gas Decision, at 136; 1991 Colonial Gas Decision, at 363-364. Because Fall River bases its normal year standard on an historical average of its own data, and its planning standards on an acceptable weather database, the Department finds that the method used by Fall River for determining its normal year standard is reviewable, appropriate, and reliable.

3. Design Year Standard

a. Description

Fall River developed its design year planning standard pursuant to a probabilistic analysis. First, the Company computed the degree days for the 1965-1997 period in order to calculate the average and

standard deviations for the entire period. Next, Fall River computed the total design year degree days using the average annual degree days plus the appropriate

T-statistic⁽⁶⁾ for a two percent recurrence probability multiplied by the standard deviation. Design winter and design summer degree days were computed using the same method, however, an allocation process was used to reduce the total degree days in order to equal the design year total. A similar process was used to develop monthly levels that were consistent with the annual totals, and a monthly distribution that included the design day. The Company analyzed a range of probabilities and developed specific standards for such range of probabilities. The Company ultimately selected a one-in-50 year standard of 7,279 DD (Exh. FRG-1, at 10; *id.*, Sch. 2). The Company noted that the number of degree days corresponded with the maximum number of degree days in the period of WSC weather data, which was 7,129 in 1977-1978 (*id.*, at 10). The Company offered the following evidence in support of its one-in-50 year standard: (1) Fall River Gas is smaller than many gas utilities in the Commonwealth; (2) the Company is served by a small lateral⁽⁷⁾ off a single pipeline; (3) the Company has a small number of supply contracts; (4) the Company makes no allowance for supply or transmission outages by including a reserve margin; and (5) the difference in cost between alternative design criteria is small on a percentage basis (Exh. DTE 1-3).

The design year was further adjusted by increasing the coldest day (January 22) of the design year to reflect a design day, and then reducing, on a pro rata basis, the remaining days of the month by an equivalent amount, in order to develop the most rigorous weather criteria possible for planning purposes. The Company calculated the design year without inclusion of a design day, but found that such a change would affect only the maximum daily quantity of the peaking resource and did not require a change in the mix of resources included in the current supply plans (RR-DTE-4).

The Company also reviewed the costs and benefits of adjusting this standard to a

one-in-30 or a one-in-100 year recurrence standard. The Company views the design day as the controlling factor in establishing a reliable supply portfolio due to (1) the difficulties of assessing the costs of avoiding customer outages, and (2) its conclusion that supplies would be available on all days except the design day (Exh. FRG-1, at 12).

The Company determined that planning for a lower design year standard, such as

one-in-30 year together with a similar design day standard, would reduce the annual effective degree days by approximately 97DDs (RR-DTE-4). The Company explained that use of the one-in-50 year standard had a cost impact of approximately 0.3 percent (*Id.*). Additionally, the Company noted it would have suffered two outages during the study period had it planned for a one-in-30 year standard (Exh. DTE 1-13).

b. Analysis and Findings

In its 1986 Gas Generic Order, 14 DOMSC 95, 96-97, 104-105 (1986), the Siting Council notified gas companies that it would place renewed emphasis on design criteria "to ensure that those criteria bear a reasonable relationship to design conditions that are likely to be encountered." The Department finds that Fall River has complied with Department precedent in this area by using a probabilistic analysis.

Regarding the Company's analysis of the benefits of planning to different standards, the Department finds that the Company has complied with Department precedent in its determination that the range was narrow of actual DDs for higher and lower probabilities. As described below in Section III, the Company's resource plan enables the Company to meet different demand levels, subject only to the additional cost associated with incremental commodity requirements (RR-DTE-4). The Department concludes that the Company presented a credible analysis in support of its use of a one-in-50 year standard. However, the Department directs the Company, in future analyses, to identify the costs and benefits that would be associated with a one-in-30 year planning standard. A one-in-30 year standard may be more accurate and cost-effective as the industry's resource alternatives evolve.

The Department finds that the method for determining the design year standard used by Fall River is reviewable, appropriate for the size and nature of the Company, and reliable, and provides a reasonable basis for resource planning decisions.

4. Design Day Standard

a. Description

The Company's design day standard establishes the minimum deliverability that the Company must have available on the coldest day for which the company is expected to plan. The Company's design day standard was based upon a probabilistic and cost/benefit analysis similar to that used by the Company to develop its design year. The Company computed the design day heating degree days to be 78.6 using a 2 percent probability, or a recurrence expectancy of once every 50 years. By comparison, the coldest historical data point was an 80-degree-day day recorded on January 17, 1982 (Exh. FRG-1, at 12).

The Company explained that it selected the one-in-50 day requirement based on an analysis of the cost consequences of employing alternative design day standards (id.) A

one-in- 30 year recurrence probability would require a 77.3 degree day (id.). Given the Company's winter heating increment of 718 MMBtu per degree day, a one-in-30 recurrence probability would reduce the design day load requirement by 933 MMBtu. By moving from a 50-year recurrence probability to a 30-year recurrence probability, the Company calculates that it saved \$133,218 dollars based on the cost of additional LNG vaporization equipment, as calculated in the Company's last rate case (Tr. at 60). While no specific information was available to suggest the customer's value to avoid an outage, discussions within the Company's management team identified both direct costs (cost to restore service and probable legal costs to settle expected liability claims) and indirect costs, that justified this level of expenditure (Exh. FRG-1, at 13). Because costs for relighting 2,668 residential pilots would be \$160,080 dollars if an outage occurred, the Company determined that the costs of maintaining the higher design standard of 78.6 EDD, or one-in-50 year, to be reasonable, especially in light of the fact that the Company experienced an 80 EDD in the past (id., at 14).

b. Analysis and Findings

The Department's design year standard requires an local distribution company ("LDC") to develop a statistically derived design year standard and to analyze the cost implications of at least two levels of reliability as part of its analysis in establishing the design year standard. See, e.g., Berkshire Gas, 19 DOMSC, at 324. The analysis requires an LDC to account for the changes that affect both demand and supply conditions in the natural gas market.

The Department has noted the necessity for all LDCs to match firm supply resources more closely with firm requirements (DPU 94-109 (Phase I), at 29). Therefore, Fall River should secure additional sources of short-term, pre-arranged, peak-period supplies and load reductions as an alternative to the current high design day reliance upon LNG. The Company is directed in its next forecast and supply plan, to enhance its analysis of the costs and benefits in adopting a one-in -30 year, as well as a one-in-50 year standard of reliability.

The Department finds that Fall River has performed an adequate analysis of the cost of unserved demand, and has reasonably quantified the actual costs associated with planning to different standards. Further, the Department finds that given the particular circumstances of Fall River, the nature of its resource portfolio, and the ongoing industry restructuring, the Company's method for determining its design day standard is reviewable, appropriate for the size of the Company, and reliable.

5. Conclusions on Planning Standards

The Department has found that Fall River used: (1) reviewable, appropriate, and reliable weather data for use in the development of its planning standards; (2) a reviewable, appropriate, and reliable normal year standard; (3) a reviewable, appropriate, and reliable design year standard; and (4) a reviewable, appropriate, and reliable design day standard. Accordingly, the Department finds that the Company's planning standards are reviewable, appropriate and reliable.

D. Forecasting Methods

1. Forecasting Model

a. Description

The forecast employed by Fall River was based upon an analysis that accounted for market area conditions, alternative fuel availability and prices, reliable and appropriate weather data and demographic projections (Exh. FRG-2). Fall River used an econometric forecasting model that employed multiple regression techniques to estimate prediction equations for the Company's number of customers and sales per customer. Based on a set of 23 predictive variables, including energy prices, and certain economic and demographic variables, the Company converted daily degree day data into daily sendout data (*id.*). The Company's methodology for forecasting its sendout requirements relies primarily upon econometric forecasting techniques, and to a much lesser extent, upon traditional engineering methods, as well as sales and marketing data (Exh. FRG-1, at 20). Fall River developed quarterly or monthly econometric specifications that related either the number of customers, or the usage per customer for each major customer group, to a variety of demographic and economic variables descriptive of conditions within the Company's service territory to the extent that statistically meaningful relationships could be demonstrated. Where statistically significant relationships could not be established, Fall River used traditional trend analysis to generate specific forecasted series for these variables. The Company considered specific demographic and economic trends in performing its trend analysis (*id.*).

2. Econometric Forecasting

The Company used internal operating statistics to estimate the econometric models. The Company collected operating data on a monthly basis for the purpose of analysis and modeling (Exh. FRG-1, at 22-23). In order to deflate the various economic series (natural gas prices, and income), the Company used Gross National Product ("GNP") implicit price deflator, GNP personal consumption expenditure deflator, consumer price index all urban, producer price indices for all commodities, and producer price index for refined petroleum products (*id.*).

The Company's rate structure classified customers with more than 70 percent of their annual use occurring in the six month winter period as low load factor. As a result of the reclassification of commercial and industrial ("C&I") customers in its 1991 rate case

Fall River Gas Company (D.T.E. 91-61), the current customer classes differ considerably from those that existed in the Company's historical database from 1983 to 1992 (*id.* at 25). The C&I sales forecasts were developed by aggregating the historical sales statistics into two groups based on their rate class, high load-factor customers and low load-factor customers. (*id.*)

The Company employed monthly data to develop degree day sensitivity factors in order to compute historical year loads under normal weather conditions. In practice, base use per customer per day was computed using the average of July and August consumption for each historical year. Next, the Company computed the annual heating sensitivity factor per degree day per customer. The calculation began with the actual consumption for the split year, reduced for base use (computed as base use per customer per day times customers times days), and divided by actual degree days. The resulting heat sensitivity factor was applied to the difference between normal and actual degree days. The Company used the same approach to compute design year sendout requirements for the forecasted test years. For this calculation, the heating

sensitivity factors (which are computed annually) were multiplied by the difference between normal and design year degree days. (id. at 26).

The Company's class load forecasts reflect the effect of customer-initiated and Company-sponsored conservation and load management activities (id., Tables G-1 - G-3). The sales forecasts assume that existing customer conservation and load management activities will continue at the same pace as past levels (id., Table G-5). The Company has concluded that its most recent DSM settlement Fall River Gas Company, D.T.E. 99-27 would increase the Company's supply requirements, but is not expected to have a material impact on the forecast and supply plan (RR-DTE-2).

a. Analysis and Findings

The econometric models developed by Fall River incorporate sufficient detail to ensure reasonable results for planning purposes. Because Fall River has (1) analyzed the predictive ability of its forecast model, (2) conducted a sensitivity analysis in its forecast, (3) considered a range of possible forecasts in its resource plans, and (4) conducted an analysis of the relationship between weather and heating usage factors in a comprehensive manner distinguishing between weekdays and weekends (Exh. FRG-1 Sch. 3), the Department finds that the forecasting model developed by Fall River is reviewable, appropriate and reliable for forecasting the normal year, design year and design day sendout for the Company's residential and C&I rate classes.

The Department is concerned, however, that as the structure of the gas marketplace changes, more customers will migrate to Firm Transportation ("FT") service. Therefore, as a requirement for approval of its next forecast and supply plan, Fall River is directed to identify any additional migration to FT service, and evaluate how changes in the FT market may affect the Company's sendout forecast.

3. Normal and Design Year Sendout Forecast

a. Description

In order to derive normal year and design year sendout, the Company first applied the usage factors to the forecast degree days (See Sections II. A.2 and 3, above). The Company then summed the forecasted sendout for the residential and C&I classes and adjusted its forecast for Company use and gas for which it had not accounted previously

(Exh. FRG-1, at 9-12).

Fall River stated that its normal year sendout for the heating season increases from 5,758 MMCF for the 1998-1999 split year, to 5,936 MMCF for the 2002-2003 split year, at an average growth rate of 0.8 percent per year (id., Sch. 10.) The Company's normal

non-heating season forecast projects an increase from 1,976 MMCF to 2,078 MMCF for the same period, for an average growth rate of 1.3 percent per year. Fall River stated that its design year sendout for the heating season increases from 6,310 MMCF in the 1998-1999 split year, to 6,476 MMCF in the 2002-2003 split year, for an average growth rate of 0.7 percent per year (id.). Fall River indicated that its design year sendout for the non-heating season increases from 2,184 MMCF in the 1998-1999 split year, to 2,281 MMCF in the 2002-2003 split year, for an average growth rate of 1.1 percent per year (id.).

b. Analysis and Findings

The Department finds that (1) the Company's normal year standard is reviewable, appropriate, and reliable, (2) the Company's design year standard is reviewable, appropriate, and minimally reliable, and (3) the residential and C&I forecasting model used by Fall River is reviewable, appropriate, and reliable.

Therefore, based on these subsidiary findings, the Department finds that the normal year sendout forecast by Fall River is reviewable, appropriate, and reliable, and that its design year sendout forecast is reviewable, appropriate, and reliable.

4. Design Day Sendout Forecast

a. Description

Fall River stated that its design day sendout forecast is based on the design day standard described above (id., at 14; See Section II. A. 4). Fall River indicated that its design day sendout increases from 70.2 MMCF for the 1998-1999 split year, to 71.6 MMCF for the 2002-2003 split year, for an average growth rate of 0.5 percent per year (id., Sch. 22).

b. Analysis and Findings

The Department finds that the Company's design day standard is reviewable, appropriate, and reliable and its residential and C&I forecasting model is reviewable, appropriate, and reliable. Thus, the Department finds the design day sendout forecast by Fall River is reviewable, appropriate, and reliable.

5. Cold Snap

The ability of Fall River to respond to a cold-snap is restricted, in part, by its local storage capacity and by its limited ability to receive propane and LNG deliveries. In order to provide a true test of the system's supply to meet the requirements of a cold-snap, the Company identified the ten consecutive days with the greatest total heating degree day content over the 34 year history of available data. The maximum heating degree ten-day total was observed during the period of February 9 through February 18, 1979. A total of 668 degree days were observed (id., at 15).

In the cold-snap, the heating degree days ranged from 58 to 73 each day. In order to model the worst case, the Company included only one weekend in the 10 day cold-snap. Using the econometric specification to predict loads, the daily sendout requirements range from a low of 54,486 MMBtu/day to a maximum level of 68,598 MMBtu/day. The regression results from the Daily Sendout Analysis and the ten day total sendout requirement is shown as 626,895 MMBtu in Exh. FRG-1 Sch. 3, p. 6b. In Exh. FRG-1, Schedule 4, the Company set forth its methods of serving cold-snap loads. The adequacy of the Company's plans to address such a scenario is addressed in Section III. C. 3.

E. Conclusions on the Sendout Forecast

The Department finds that the planning standards by Fall River are reviewable, appropriate, and reliable. Further, the Department finds that the normal year sendout forecast, design year and design day by Fall River is reviewable, appropriate, and reliable. Finally, the

Department finds that the cold-snap scenario analysis presented by Fall River is reviewable, appropriate, and reliable. Based on these subsidiary findings, the Department approves the sendout forecast of Fall River for the split years 1998-1999 through 2002-2003.

III. ANALYSIS OF THE SUPPLY PLAN

A. Standard of Review

The Department is required to ensure "a necessary energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost." G.L. c. 164, § 69I. In fulfilling this mandate, the Department reviews a gas company's supply planning process and the two major aspects of every utility's

supply plan -- adequacy and cost.⁽⁸⁾ Commonwealth Gas Company, D.P.U. 92-159, at 53; Colonial Gas Company, D.P.U. 93-13, at 49-50; 1992 Boston Gas Decision, 25 DOMSC at 201.

The Department reviews a gas company's five-year supply plan to determine whether the plan is adequate to meet projected normal year, design year, design day, and cold-snap firm sendout requirements.⁽⁹⁾ In order to establish adequacy, a gas company must demonstrate that it has an identified set of resources that meet its projected sendout under a reasonable range of contingencies. If a company cannot establish that it has an identified set of resources which meet sendout requirements under a reasonable set of contingencies, the company must then demonstrate that it has an action plan which meets projected sendout in the event that the identified resources will not be available when expected. Colonial Gas Company, D.P.U.

96-18, at 31; Commonwealth Gas Company, D.P.U. 92-159, at 54; Colonial Gas Company, D.P.U. 93-13, at 50.

In its review of a gas company's supply plan, the Department reviews a company's overall supply planning process. An appropriate supply planning process is essential to the development of an adequate, low-cost, and low environmental impact resource plan. Pursuant to this standard, a gas company must establish that its supply planning process enables it to

(1) identify and evaluate a full range of supply options, and (2) compare all options -- including C&LM -- on an equal footing. Colonial Gas Company, D.P.U. 96-18, at 31; Commonwealth Gas Company, D.P.U. 92-159, at 54; Colonial Gas Company, D.P.U. 93-13, at 51; 1992 Boston Gas Decision, 25 DOMSC at 202.⁽¹⁰⁾

Finally, the Department reviews whether a gas company's five year supply plan minimizes cost. A least-cost supply plan is one that minimizes costs subject to trade-offs with adequacy and environmental impact. Commonwealth Gas Company, D.P.U. 92-159, at 55; Colonial Gas Company, D.P.U. 93-13, at 51-52; 1992 Boston Gas Decision, 25 DOMSC at 203. Here, a gas company must establish that application of its supply planning process has resulted in the addition of resource options that contribute to a least-cost plan.

B. Base Case Supply Plan

1. Supply-Side Resources

The Company stated that its firm pipeline-transported gas supply at the time of its filing was provided by Sempra Energy under a long-term purchase contract, now under a one-year extension period⁽¹¹⁾ (Exh. FRG-1, Sch. 23 (Table G-24); RR-DTE-1). The Company indicated that this contract provides for up to 18,931 Dth per day of firm supply delivered to the Company system on a 365 day primary firm basis (Exh. FRG-1, Sch. 23 (Table G-24)). Fall River has a 151 day contract for up to 5,000 Dth per day with Distrigas of Massachusetts ("DOMAC"), to which primary firm transportation capacity rights are attached (Tr. 34). The Company also has a LNG liquid contract with DOMAC to provide up to 3,600 Dth per day with an Annual Contract Quantity of 200,000 Dth (Exh. FRG-1, Sch. 23 (Table G-24)). These supplies will be trucked. The Company also had a 151 day and a 40 day contract with Duke Energy that expired on October 31, 1999. Id. Finally, the Company purchases spot gas to lower its commodity cost, as appropriate.

Fall River stated that its capacity entitlements on the Algonquin Gas Transmission Company ("Algonquin") and Texas Eastern Transmission Company ("TETCO") systems provide access to gas production fields and storage for transporting gas deliveries to the Company's service area. The Company maintains long-haul 365 day capacity from the gas producing regions of 18,827 Dth per day with TETCO and 20,024 Dth per day with Algonquin (Exh. FRG-1, Sch. 23 (Table G-24)). The Company also has 11,321 MMBtu/day of capacity with TETCO that is used to transport gas from underground storage fields in Pennsylvania, New York and West Virginia (id.). Additionally, the Company has interruptible transportation contracts (1,070 per day with TETCO and Algonquin) and winter service of 7,124 Dth per day with Algonquin. The Company stated that during the heating season, its supply and storage volumes are supplemented by LNG

vaporized from Company facilities, and in some cases, by propane from the Company's propane facilities (Exh. FRG-1, at 32). The Company's use of LNG and propane is limited by on-site storage capacity and trucking restrictions (Exh. FRG-1, at 40).

Fall River secured a portion of its requirements under short-term contracts with DOMAC and Duke to minimize cost exposure and to maximize its portfolio flexibility.⁽¹²⁾ However, Fall River reports that its suppliers are insisting increasingly on longer-term agreements (Exh. FRG-1, at 47). The Company's forecast demonstrates the need for an 8,000 Dth per day supply contract for a 40 day peaking service, and a 5,000 Dth per day winter service (151 days) with firm liquid conversion rights. Additionally, the Company must renew or replace its existing liquid LNG contract.

Regarding the Semptra contract, Fall River has begun discussions with potential suppliers and expects to initiate an RFP process by the end of August, 1999.⁽¹³⁾

2. Conservation and Load Management

Fall River stated that its existing DSM programs were established in 1995 (Fall River Gas Company; D.P.U. 92-212 (1994)). The Company noted that its DSM programs have saved approximately 86,886 Dth since 1995 (Exh. FRG-1, at 15).

The DSM filing⁽¹⁴⁾ and subsequent Settlement⁽¹⁵⁾ of the Company's most recently approved DSM Programs Fall River Gas Company, D.T.E. 99-27 (1999), indicate that the Company's residential DSM program is coordinated with local CAP agencies and includes a substantial low income component. Id., at 3. The Company's DSM programs target residential and C&I customers. These programs were established pursuant to the Settlement Agreement in D.P.U. 97-62. Fall River currently provides three types of DSM programs:

(1) Residential DSM Programs (consisting of a Residential Program and Multi-Family/Rental Program, both of which programs contain low-income components); (2) C&I DSM Programs (including the ramp down of the traditional small C&I Program and the Large C&I Program); and (3) Market Transformation Initiatives. Fall River Gas Company, D.T.E. 99-27, at 2-3. The Company's Residential DSM Programs are approved for operation during the twenty-four month pre-approval period commencing May 1, 1999 and ending April 13, 2001. Id., at 2.

C. Adequacy of the Supply Plan

1. Normal and Design Year Adequacy

a. Description

Fall River submitted its supply plans for meeting its forecasted normal year and design year sendout requirements throughout the forecast period (Exh. FRG-1, Sch. 21 Tables G-22N and G-22D). Fall River explained that it plans to meet its normal year and design year heating season needs by using a combination of existing firm pipeline supplies, underground storage, DSM, LNG vaporized at its local facility, LNG liquid from DOMAC, propane injections, and at least two new supply contracts to replace those that expired (id.). Fall River forecasts that normal year firm sendout requirements will decrease from 4,768 BBtu in the 1998-1999 heating season to 4,335 MMCF in the 2002-2003 heating season, largely due to the migration of customers to transportation. Fall River forecasts that design year firm sendout requirements will decrease from 5,332 BBtu in the 1998-1999 heating season to 4,810 BBtu in the

2002-2003 heating season.

The Company also indicated that it would include a small amount of spot market purchases in its resource plan for the design year (Exh. FRG-1, Sch. 21). The role of the spot market in a design year is limited to storage refill in the summer months, pipeline spot purchases to refill storage fields and spot purchases on exceptionally warm winter days (those days that are warmer than 40° F), in order to provide additional storage volumes

(Exh. FRG-1, at 41).

When third party suppliers are added to the forecast firm sales sendout requirements, Fall River forecasts that the normal year total sendout requirements will increase from 5,888 BBtu in the 1998-1999 heating season, to 6,264 BBtu in the 2002-2003 heating season. Fall River forecasts that the design year total sendout requirement will increase from 6,589 BBtu in the 1998-1999 heating season, to 6,822 BBtu in the 2002-2003 heating season (Exh. FRG-1, Sch. 1, Table G22N and G22D).

b. Analysis and Findings

As noted previously, the Department has found the Company's normal year and design year forecast to be reviewable, appropriate, and reliable. The analyses by Fall River demonstrated that its resource portfolio would enable it to meet firm requirements in a normal and a design year throughout the forecast period. Based on these subsidiary findings and the sendout and supply tables, the Department finds that the Company has demonstrated that it has adequately planned for the resources necessary to meet its forecasted normal and design years. Accordingly, the Department finds that Fall River has established that its normal year and design year supply plans are adequate to meet the Company's forecasted sendout requirements throughout the forecast period.

2. Design Day Adequacy

a. Description

Fall River presented supply plans for meeting its forecasted design day sendout requirements throughout the forecast period (Exh. FRG-1, Sch. 22, Table G-23). Fall River plans to meet its design day needs through existing firm pipeline supplies, underground storage, DSM, limited propane injections and limited new supply agreements that it intends to enter into shortly (*id.*). Fall River forecasts that design day firm sendout requirements will increase from 70,208 MMBtu in the 1998-1999 heating season, to 71,642 MMBtu in the

2002-2003 heating season (Exh. FRG-1, Sch. 22, Table G-23).

In the 2002-2003 design year, the unserved load curve shows that the maximum needs occur for approximately 30 of the coldest days of the year (Exh. FRG-1, Sch. 26). The Company has adequate supplies for the entire summer and the warmer days of winter (*id.*). Therefore, the Company has divided gas supplies into a peaking service of 40 days and 151 day winter service. Further, to address LNG boil-off and tank refilling, and to allow necessary latitude for gas dispatching uncertainty, the Company expects that the firm liquid contract would likely be sized at 5,000 Dth per day, making the peaking service 8,000 Dth per day.⁽¹⁶⁾ This assumption forms the basis for the dispatch results shown on Exh. FRG-1, Schedule 21, Table 22. Thus, the Company proposes to enter into two contracts for the 2002-2003 year: an 8,000 Dth per day supply contract for 40 day peaking service, and a 5,000 Dth per day winter service with firm liquid conversion privileges (Exh. FRG-1 at 45).

b. Analysis and Findings

As noted previously, the Department finds the design day forecast is reviewable, appropriate, and reliable. Based on this subsidiary finding and the sendout and supply tables, the Department finds that Fall River has

demonstrated that it has adequate supplies and facilities, as supplemented by the new contracts discussed above, to meet forecasted sendout requirements under the design day conditions throughout the forecast period.

3. Cold Snap Adequacy

a. Description

As noted in Section II. D. 5 above, the Company determined that in order to meet its demand during an extreme cold snap, it would have to be able to serve the ten-day total sendout requirement of 626,895 MMBtu (Exh. FRG-1 Schedule 3, at 6b). Fall River explained that in order to meet this extended period of peak demand, it could dispatch its full portfolio of pipeline supplies, storage volumes, LNG and propane at its production facilities. The Company's filing demonstrated that the existing and proposed supply resources could satisfy such a contingency (Exh. FRG-1, Schedule 4).

b. Analysis and Findings

Based on the Company's analysis, the Department finds that Fall River has demonstrated that it has adequate supplies to meet its firm sendout requirements during a prolonged cold snap.

4. Conclusions on the Adequacy of the Supply Plan

The Department finds that (1) the normal year and design year supply plans are adequate to meet the Company's forecasted sendout requirements throughout the forecast period, (2) the Company has demonstrated that it has adequate supplies (with replacement of expired short-term supplies) and facilities to meet forecasted sendout requirements under design day conditions throughout the forecast period, and (3) the Company has demonstrated that it has adequate supplies to meet its firm sendout requirements during a prolonged cold snap. Based on these subsidiary findings, the Department finds that Fall River has established that it has identified adequate resources to meet its firm sendout requirements throughout the forecast period.

D. Supply Planning Process

1. Standard of Review

The Department has determined that a supply planning process is critical in enabling a utility company to formulate a resource plan that achieves an adequate, least-cost and low environmental impact supply for its customers. D.P.U. 94-14, at 36; D.P.U. 93-13, at 70; 1992 Boston Gas Decision at 223; 1990 Boston Gas Decision at 388. The Department has noted that an appropriate supply planning process provides a gas company with an organized method of analyzing options, making decisions, and re-evaluating decisions in light of changed circumstances. Id. For the Department to determine that a gas company's supply planning

process is appropriate, the process must be fully documented. D.P.U. 93-13, at 70; 1992 Boston Gas Decision at 223; 1987 Berkshire Gas Decision at 84.

The Department's review of a gas company's process for identifying and evaluating resources focuses on whether the company: (1) has a process for compiling a comprehensive array of resource options -- including pipeline supplies, supplemental supplies, DSM, and other resources; (2) has established appropriate criteria for screening and comparing resources within a particular supply category; (3) has a mechanism in place for comparing all resources, including DSM, on an equal basis, i.e., across resource categories, and (4) has a process that as a whole enables the company to achieve an adequate, least-cost, and low environmental impact supply plan. D.P.U. 94-140, at 37; D.P.U. 93-13, at 70; 1992 Boston Gas Decision at 224; 1990 Boston Gas Decision at 54-55.

As set forth in Section III.A, above, the Department reviews a gas company's five-year supply plan to determine whether it minimizes cost, subject to trade-offs with adequacy and environmental impact. D.P.U. 94-140, at 37; D.P.U. 93-13, at 88; 1992 Boston Gas Decision at 236; 1987 Boston Gas Decision at 214. A gas company must establish that the application of its supply planning process, including adequate consideration of DSM and consideration of all resource options on an equal basis, has resulted in the addition of resource options that contribute to a least-cost supply plan. D.P.U. 94-140, at 37; D.P.U. 93-13, at 83; 1992 Boston Gas Decision at 233; 1986 Berkshire Decision at 115. As part of this review, the Department requires gas companies to show, at a minimum, that they have completed comprehensive cost studies comparing the costs of a reasonable range of practical supply alternatives prior to selection of major new resources for their supply plans. D.P.U. 94-140, at 37; D.P.U. 93-13, at 89; 1992 Boston Gas Decision at 236; 1986 Gas Generic Order at

100-102.

2. Identification and Evaluation of Resource Options

a. Supply-Side Resources

i. Description

Fall River stated that the supply planning process for natural gas companies has become increasingly complex and that the market and regulatory environment are continually changing. (Exh. FRG-1, at 35). Fall River stated that it actively monitors and evaluates its existing gas resources within the context of ongoing industry changes. Fall River explained that it employs sophisticated and comprehensive resource planning techniques to ensure the development of safe and reliable service with a minimum impact upon the environment at the lowest possible cost (id., at 4-6, 45-48).

Fall River explained that it first employs its forecast of firm sendout as the basis for designing its resource portfolio. Next, the Company evaluates the particular mix of resources that should be included in the least-cost portfolio dispatch optimization analysis (Exh. FRG-1, at 34-35).

Fall River stated that once a resource need arises, the Company attempts to identify and monitor on a continuing basis all of the possible resource options available to meet that need (Exh. FRG-1, at 38). Fall River described its participation in consortia to pursue gas supply contracting on a collective basis. The Company indicated that it most recently has become a member of a group of nine utilities served on the Texas Eastern and Algonquin pipeline systems. (Exh. DTE 1-2). According to the Company, the collective contracting has resulted in considerable benefits to the Company (Exh. DTE 1-2). The Company stated that it has issued and will continue to issue RFPs to assess the competitive market, in order to prepare and release a targeted solicitation of interest. Fall River stated that once it receives responses to the RFP, it performs a preliminary review to narrow the list of proposals for further analysis. The Company explained that the preliminary screening focuses on the type of the need and the planning time horizon (Exh. FRG-1, at 47).

Fall River explained that it analyzes proposals based on price and non-price criteria (Exh. FRG-1, at 46-47). The Company stated that price is the most readily quantifiable criterion the Company applies in evaluating resource options (Exh. FRG-1, at 46). Fall River employs its dispatch model to measure the change in total cost that would be produced by each resource option if incorporated into the Company's portfolio. The Company stated that its analyses and RFPs have considered non-price factors, including reliability, diversity, and flexibility (Exh. FRG-1, at 46). The Company also stressed the importance of obtaining supplies delivered to its system on a primary firm basis (Exh. D.T.E. 3-4). With increases in pipeline loads, the Company perceives an increased potential during peak periods for curtailment of secondary capacity rights (Exh. DTE 3-4).

ii. Analysis and Findings

Previously, the Department has endorsed LDC acquisition processes that involved the solicitation of competitive bids from alternative suppliers. Holyoke Gas and Electric Department, D.P.U. 93-191, at 30 (1996); Blackstone Gas Company, D.P.U. 95-15, at 7 (1996); D.P.U. 93-13, at 85-88; Berkshire Gas Company, D.P.U. 94-38, at 10 (1995). In the current proceeding, the Department finds that the RFP process used by Fall River to identify alternative suppliers is appropriate. Fall River applies price and non-price criteria to determine which options to pursue, and considers both short-term and long-term options. The Company's process for evaluating supply options was approved by the Department in earlier decisions involving gas supply contracts (see D.P.U. 94-38). Accordingly, the Department finds that Fall River has formulated an appropriate process for identifying a comprehensive array of supply options, and has developed appropriate criteria for screening and comparing supply resources.

b. Demand-Side Management

i. Description

Fall River states that it has integrated DSM opportunities into the resource planning process, consistent with the Company's pre-approved DSM program (Exh. FRG-1, at 3). Fall River stated that it is committed to implementing DSM programs as an option to traditional gas supplies and has developed a set of programs with the assistance of Energy Investments, Inc. and the Bay State Gas Company (Exh. FRG-1, at 4). Such programs have been presented to and approved by the Department and have been implemented ((Fall River Gas Company, D.T.E., 99-27 (1999), Fall River Gas Company, D.T.E. 97-62 (1997), Fall River Gas Company, D.P.U. 91-212 (1994)). Fall River stated that in evaluating DSM with respect to supply resources, the Company performs a cost-benefit analysis based on avoidable supply cost estimates (Exh. FRG-1, at 15-16).

The Company indicated that its DSM programs have saved customers about 86,886 Dth since 1995 (id.). The Company stated that it has undertaken various market transformation initiatives (see Fall River Gas Company, D.T.E. 99-27, at 4). These initiatives include, but are not limited to, sponsoring the residential high efficiency equipment heating rebate program developed by the Massachusetts Natural Gas DSM/Market Transformation Collaborative, participating in the Collaborative's regional education and training efforts, and when and if cost-effectively developed, participating in the Collaborative's residential hot water and C&I equipment rebate efforts and submitting a baseline study (either individually or jointly with other members of the Collaborative) during the pre-approval period for use in pursuing market transformation initiatives. Fall River Gas Company, D.T.E. 99-27, at 4.

ii. Analysis and Findings

Fall River has an established process to identify and evaluate the cost-effectiveness of its DSM programs, and it provides DSM programs to its residential and C&I customers. Accordingly, the Department finds that Fall River has formulated an appropriate process for identifying a comprehensive array of DSM options and has developed appropriate criteria for screening and comparing DSM resources. In addition, the Department notes that Fall River is in compliance with the Department's directives in terms of refocusing its DSM activities toward market transformation activities.

3. Consideration of All Resources on an Equal Basis

a. Description

Fall River stated that its resource planning process considers a wide range of resources in its planning process, including: pipelines, supply options, storage options, supplemental supply options, DSM options, and arrangements with the operator of an electric generating plant (Exh. FRG-1, pp. 4-6; Tr. 21; Exh. DTE 3-4). The Company's dispatch model analyzed the merits of each resource during the course of the Company's planning analysis

(Exh. FRG-1, Schedule 24). The Department recently approved a three year contract between Fall River and Distrigas of Massachusetts, which entitles the Company to purchase up to 5,000 MMBtu of vaporized or liquid LNG on a daily basis. See Fall River Gas D.T.E. 99-88 (2000)

b. Analysis and Findings

The Department has held that in order for a gas company's planning process to minimize cost, that process must adequately consider alternative resource additions, including DSM options, on an equal basis. D.P.U. 93-13, at 83; Boston Gas Company, 25 DOMSC at 233; Berkshire Gas Company, 15 DOMSC at 115. The record shows that the Company has a method to evaluate resources within a single resource group, and that it evaluates options across resource groups using industry-accepted standards. Accordingly, the Department finds that Fall River has incorporated both supply-side and demand-side options in its resource mix and has compared all resources, including DSM, on an equal basis.

4. Conclusions on the Supply Planning Process

The Department finds that Fall River has: (1) formulated an appropriate process to identify a comprehensive array of supply options, and has developed appropriate criteria for screening and comparing supply resources; (2) formulated an appropriate process for identifying a comprehensive array of DSM options, and has developed appropriate criteria for screening and comparing DSM resources; and (3) incorporated both supply-side and demand-side options in its resource mix, and it has compared all resources, including DSM, on an equal basis. Accordingly, the Department finds that Fall River has developed an appropriate supply planning process.

E. Least-Cost Supply

1. Fall River's Least-Cost Analysis

a. Description

Fall River stated that through its resource evaluation process, it identified the need to obtain two new contracts to replace the expiring Distrigas and Duke contracts for purposes of ensuring adequate winter and peaking supplies. Specifically, Fall River proposes an 8,000 Dth per day supply contract for 40 day peaking service and a 5,000 Dth per day winter service with firm liquid conversion privileges.⁽¹⁷⁾ The Company based this proposal on its consideration of resource requirements and the potential contribution of DSM activities, as well as consideration of a range of alternative supply combinations. Upon receipt of supply proposals, the Company will apply its financial analysis tools, network analysis and expert consultants, to perform cost analyses and assess the non-price impacts for the different options. Fall River stated that it needs to have such contracts in place for the winter season (Exh. FRG-1, at 37). In response to Department inquiry, the Company determined that a reduction in its planning standards would only change the proposed resource additions by reducing the peaking service to 7,000 Dth (RR-DTE-4). Because of supplier requirements, the Company anticipates that it will be required to enter into contracts for a period greater than one year (Exh. FRG-1, at 47).

b. Analysis and Findings

The Company has identified the need for entering into new (or replacement) contracts for peaking service and for winter service (the latter with liquid conversion rights⁽¹⁸⁾) in the amounts of 8,000 Dth per day and 5,000 Dth per day, respectively. The Department finds that obtaining supplies as proposed would be consistent with fulfilling the Company's forecast requirements. However, because the Company has not identified specific contracted resources to meet its supply need, the Department does not specifically address the addition of any specific resource in the context of a least-cost supply plan.

F. Conclusions on the Supply Plan

The Department finds that, with the immediate replacement of the existing Distrigas and Duke contracts, and the replacement of the Semptra contract in the second year of the forecast, as described above, Fall River has properly identified adequate resources to meet its firm sendout requirements throughout the forecast period. The Department finds that Fall River developed an appropriate supply planning process. Accordingly, the Department approves the Company's supply plan for the split years 1998-1999 through 2002-2003.

IV. CONCLUSION

The Department hereby approves the 1998-2003 sendout forecast and supply plan of Fall River Gas Company. In so deciding, the Department has detailed specific information that Fall River must provide in its next filing in order for the Department to approve that filing. This information is necessary for the Department to fulfill its statutory mandate. Therefore, in order for the Department to approve Fall River's next forecast and supply plan filing, the Company must:

- (1) refine the determination of its design year standard and design day standard by further review of the costs and benefits to its customers of maintaining different levels of reliability;
- (2) identify any additional migration to FT service, and evaluate how such changes in the FT market, including the impact of the unbundling process initiated with D.T.E. 98-32, will affect the Company's sendout forecast; and
- (3) refine its sendout forecast by developing variables that explain customer usage and seasonal variation in greater detail.

V. ORDER

Accordingly, after due notice, hearing and consideration, it is

ORDERED: That Fall River Gas Company's petition for approval of its long-range sendout forecast and supply plan be and hereby is approved; and it is

FURTHER ORDERED: That Fall River Gas Company comply with all of the directives contained herein prior to filing its next long-range forecast and supply plan; and it is

FURTHER ORDERED: That Fall River Gas Company shall file its next long-range sendout forecast and supply plan with the Department by June 30, 2002.

By Order of the Department,

James Connelly, Chairman

W. Robert Keating, Commissioner

Paul B. Vasington, Commissioner

Eugene J. Sullivan, Jr., Commissioner

Deirdre K. Manning, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).

1. ¹ Pursuant to Chapter 141 of the Acts of 1992 ("Reorganization Act"), the Energy Facilities Siting Council ("Siting Council") was merged with the Department, and an Energy Facilities Siting Board ("Siting Board") was created within the Department, effective September 1, 1992. Reorganization Act, § 55. As a result of the merger, the Department was given jurisdiction to review utility forecast and supply plans, a function previously performed by the Siting Council. G.L. c. 164, § 69I. The terms Siting Council and Siting Board will be used in this decision as appropriate to the circumstances being discussed.

2. ² The Siting Council defined a split year as November 1 through October 31. The heating season is defined as November 1 through March 31, and the non-heating season is defined as April 1 through October 31. Energy Facilities Siting Council Administrative Bulletin 86-1, at 5.

3. ³ The Company's forecast period began with the split year 1998-1999 because the filing was being prepared and was filed before the end of that year.

4. A cold-snap is a prolonged series of days at or near design conditions. D.P.U. 93-13, at 66; 1992 Boston Gas Decision at 217; Commonwealth Gas, 17 DOMSC 71, at 137 (1998) ("1998 Commonwealth Gas Decision").

5. ⁵ The design day represents the coldest day for which the utility plans to provide reliable firm service.

6. The T test is a statistical measure used to identify the likelihood that the summary measures of a distribution reflect a normal distribution of such observations.

7. A lateral is a pipe that branches away from the central and primary part of the system.

8. G.L. c.164, § 69I also directs the Department to balance cost considerations with environmental impacts in ensuring that the Commonwealth has a necessary supply of energy. Colonial Gas Company, D.P.U. 96-18, at 31; Commonwealth Gas Company, D.P.U. 92-159, at 53; Colonial Gas Company, D.P.U. 93-13, at 50.

9. The Department's review of reliability, another necessary element of a gas company's supply plan, is included within the Department's consideration of adequacy. See Colonial Gas Company, D.P.U. 93-13, at 50, n. 22; 1992 Boston Gas Decision, 25 DOMSC at 201, n. 87; Boston Gas Company, 16 DOMSC 173, at 214 (1987).

10. G.L. c. 164, § 69I, requires a utility company to demonstrate that its long-range forecast "include[s] an adequate consideration of conservation and load management." Initially, the Siting Council reviewed gas C&LM efforts in terms of cost minimization issues. In the 1988 Commonwealth Gas Decision, 17 DOMSC at 122-126, the Siting Council expanded its review to require a gas company to demonstrate that it has reasonably considered C&LM programs as resource options to help ensure that it has adequate supplies to meet projected sendout requirements.

11. An additional five-month extension is currently under review. D.T.E. 99-GC-18.

12. Fall River expects to be able "to reduce its supply mix in the coming years in response to anticipated sales load migration." Exh. FRG-1, at 37.

13. In Fall River Gas, D.T.E. 99-63 (1999), the Department approved a contract between Fall River and Sempra. The terms of the approved contract are similar to those approved in Fall River Gas, D.P.U. 94-38 (1995) except for a reduction in reservation fees.

14. Pursuant to the Company's request, the DSM filing was incorporated by reference into this docket.

15. The Department approved a settlement of this issue in August, 1999.

16. Liquid conversion privileges allow contract volumes not taken as vapor to be converted to liquid and used to resupply the Company's storage tank.

17. ¹⁷ Further, Fall River must renew (or obtain suitable replacement for) its recently expired DOMAC liquid contract. The Company is also exploring the possibility of obtaining firm pipeline capacity to deliver potential peaking service from a local electric generator's facilities to the Company's facilities. (Exh. DTE 3-4). The feasibility of this potential resource is not yet known.

18. ¹⁸ As described above, such conversion rights provide the Company considerable additional flexibility because of the alternative delivery by truck or vaporization at the Company's LNG facility.